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Applicant : Fred R. Kramer, Sanjay Tyagi, Art Unit : Unknown
Salvatore A.E. Marras and Hiyam Examiner : Unknown
Elhajj Trunfio
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Title : OPTICALLY DECODABLE MICROCARRIERS, ARRAYS AND METHODS

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INFORMATION DISCLOSURE STATEMENT

Applicant submits the references listed on the attached form PTO-1449.

This statement is being filed with the application. Accordingly, only copies of foreign patent documents and non-patent literature are enclosed. Please apply any charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

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3/2/04

William J. Hone
William J. Hone
Reg. No. 26,739

Fish & Richardson P.C.
45 Rockefeller Plaza, Suite 2800
New York, New York 10111
Telephone: (212) 765-5070
Facsimile: (212) 258-2291

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Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 07763-057001	Application No.
Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b))		Applicant Fred R. Kramer, Sanjay Tyagi, Salvatore A.E. Marras and Hiyam Elhajj Trunfio	
		Filing Date	Group Art Unit

U.S. Patent Documents

Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA	5,925,517	Jul. 20, 1999	Tyagi et al.			
	AB	6,150,097	Nov. 21, 2000	Tyagi et al.			
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

Foreign Patent Documents or Published Foreign Patent Applications

Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
	AL	WO/00/14278	Mar. 16, 2000	WIPO				
	AM							
	AN							
	AO							
	AP							

Other Documents (include Author, Title, Date, and Place of Publication)

Examiner Initial	Desig. ID	Document
	AQ	Adessi, et al. "Solid phase DNA amplification: characterisation of primer attachment and amplification mechanisms" <i>Nucleic Acids Research</i> , (2000) Vol. 28, No. 20 e87
	AR	Albert et al, "Automatic decoding of sensor types within randomly ordered, high-density optical sensor arrays" <i>Analytical and Bioanalytical Chemistry</i> , (August 2002) Vol. 373, No. 8, pp: 792 - 802
	AS	Bonnet, et al. "Thermodynamic basis of the enhanced specificity of structured DNA probes", <i>Proc. Natl. Acad. Sci.</i> (May 1999) Vol. 96, pp. 6171-6176
	AT	Braeckmans, et al. "Encoding Microcarriers: Present and Future Technologies" <i>Nature Publishing Group, Nature Reviews</i> , (June 2002) Vol. 1 pp. 447-456

Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

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	AU	Brenner, et al. "Gene expression analysis by massively parallel signature sequencing (MPSS) on microbead arrays" <i>Nature Biotechnology</i> , (June 2000) Vol. 18, pp: 630-634		
	AV	Brown, et al. "Molecular beacons attached to glass beads fluoresce upon hybridisation to target DNA" <i>Chem. Commun.</i> (2000), 621-622		
	AW	Call, et al. "Fabrication of DNA Microarrays Using Unmodified Oligonucleotide Probes" <i>BioTechniques</i> , (February 2001) 30: 368-379		
	AX	Chen, et al. "A Microsphere-Based Assay for Multiplexed Single Nucleotide Polymorphism Analysis Using Single Base Chain Extension" <i>Genome Research</i> (2000) 10: 549-557		
	AY	Danowski, et al. "Evaluating the chemical spatial resolution of imaging fiber chemical sensors" <i>Microchemical Journal</i> (2001) 70: 51-61		
	AZ	Dickinson, et al. "Convergent, Self-Encoded Bead Sensor Arrays in the Design of an Artificial Nose" <i>Analytical Chemistry</i> , (June 1, 1999) 71: 2192-2198		
	AAA	Epstein, et al. "High-Density Fiber-Optic Genosensor Microsphere Array Capable of Zeptomole Detection Limits" <i>Analytical Chemistry</i> (2002) 74: 1836-1840		
	ABB	Epstein, et al. "Combinatorial Decoding: An approach for Universal DNA Array Fabrication" <i>J. Am. Chem. Soc.</i> (2003) 125: 13753-13759		
	ACC	Ferguson, et al. "A fiber-optic DNA biosensor microarray for the analysis of gene expression" <i>Nature Biotechnology</i> (December 1999) 14: 1681-1684		
	ADD	Ferguson, et al. "High-Density Fiber-Optic DNA Random Microsphere Array" <i>Analytical Chemistry</i> (November 2000) 72: 5618-5624		
	AEE	Guo, et al. "Direct fluorescence analysis of genetic polymorphisms by hybridization with oligonucleotide arrays on glass supports" <i>Nucleic Acids Research</i> , (1994) 22: 5456-5465		
	AFF	Han, et al. "Quantum-dot tagged microbeads for multiplexed optical coding of biomolecules" <i>Neuter Biotechnology</i> (July 2001) 19: 631-635		
	AGG	Kellar, et al. "Multiplexed microsphere-based flow cytometric assays" <i>Experimental Hematology</i> (2002) 30: 1227-1237		
	AHH	Lee, et al. "Importance of replication in microarray gene expression studies: Statistical methods and evidence from repetitive cDNA hybridizations" <i>PNAS</i> (August 29, 2000) 97: 9834-9839		
	AII	Liu, et al. "Molecular Beacons for DNA Biosensors with Micrometer to Submicrometer Dimensions" <i>Analytical Biochemistry</i> (2000) 283: 56-63		
	AJJ	Lui, et al. "A fiber-Optic Evanescent Wave DNA Biosensor Based on Novel Molecular Beacons" <i>Analytical Chemistry</i> (1999) 71: 5054-5059		
	AKK	Marras, et al. "Efficiencies of fluorescence resonance energy transfer and contact-mediated quenching in oligonucleotide probes" <i>Nucleic Acids Research</i> (2002) 30: e122		
	ALL	Michael, et al. "Randomly Ordered Addressable High-Density Optical Sensor Arrays" <i>Analytical Chemistry</i> (1998) 70: 1242-1248		
	AMM	Miller, Kelli "Downsizing DNA Assays - - Pharmaseq's microtransponders prove that bigger isn't always better" <i>The Scientist</i> (2002) 16[1]: 52		
	ANN	Nicewarner-Pena, et al. "Submicrometer Metallic Barcodes" <i>Science</i> (2001) 294: 137-141		
	AOO	Oliphant, et al. "BeadArray™ Technology: Enabling an Accurate, Cost-Effective Approach to High-Throughput Genotyping" <i>BioTechniques</i> (June 2002) 32: S56-S61		

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	APP	Rosenthal, Sandra J. "Bar-coding biomolecules with fluorescent nanocrystals" <i>Nature Biotechnology</i> (2001) 19: 621-622					
	AQQ	Spiro, et al. "A Bead-Based Method for Multiplexed Identification and Quantitation of DNA Sequences Using Flow Cytometry" <i>Applied and Environmental Microbiology</i> (2000) 66: 4258-4265					
	ARR	Spruill, et al. "Assessing Sources of Variability in Microarray Gene Expression Data" <i>BioTechniques</i> (2002) 33: 916-923					
	ASS	Steemers, et al. "Screening unlabeled DNA targets with randomly ordered fiber-optic gene arrays" <i>Nature Biotechnology</i> (2000) 18: 91-94					
	ATT	Tsagkatakis, et al. "Spatial and Spectral Imaging of Single Micrometer-Sized Solvent Cast Fluorescent Plasticized Ploy(vinyl chloride) Sensing Particles" <i>Analytical Chemistry</i> (2001) 73: 315320					
	AUU	Tyagi et al, "Molecular Beacons: Probes that Fluoresce upon Hybridization" <i>Nature Biotechnology</i> (1996) 14: 303-308					
	AVV	Tyagi et al. "Multicolor molecular beacons for allele discrimination" <i>Nature Biotechnology</i> (1998) 16: 49-53					
	AWW	Tyagi et al. "Taking a census of mRNA populations with microbeads" <i>Nature Biotechnology</i> (2000) 18: 597-598					
	AXX	Walt, David R. "Bead-based Fiber-Optic Arrays" <i>Science</i> (2000) 287: 451-452					
	AYY	Walt, David R. "Imaging optical sensor arrays" <i>Current Opinion in Chemical Biology</i> (October 2002) 6: 689-695					
	AZZ	Yang, et al. "BADGE, BeadsArray for the Detection of Gene Expression, a High-Throughput Diagnostic Bioassay" <i>Genome Research</i> (2001) 11: 1888-1898					
	AAAA	Yeakley, et al. "Profiling alternative splicing on fiber-optic arrays" <i>Nature Biotechnology</i> (2002) 20: 353-358					
	ABBB	PharmaSeq, Inc. "Animation: Principle of Microtransponder-Based Assay" http://www.pharmaseq.com/tech.html#desc (pp. 1-3)					

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